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Research on the Strategy of Higher Education Promoting the Development of Agricultural New Quality Productivity

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Abstract: The development of new agricultural productivity has an important impact on promoting high-quality agricultural development in China. Higher education plays an important role in promoting the improvement of agricultural new quality productivity. This article summarizes the concept of agricultural new quality productivity in China and analyzes the following problems that Chinese universities face in supporting the development of agricultural new quality productivity: disciplines not only lag behind economic development; Imbalance between talent cultivation and market demand; The difficulty of transforming technological achievements is high. On this basis, several suggestions were put forward: optimizing the layout of disciplines and majors; Enhance the level of theoretical and technological innovation in agriculture; Enhance the ability to serve society.

Keywords: higher education; agriculture new quality productivity; promotion strategy

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1. Introduction

Agricultural new quality productivity is an important component of new quality productivity, with common characteristics of new quality productivity. From the perspective of the elements that make up productivity. The laborers in the new quality productivity of agriculture are new-type laborers who master digital technology and advanced agricultural production technology, are proficient in using new agricultural tools, and possess innovative thinking abilities. From the perspective of labor materials, new types of labor materials tend to be scaled up, digitized, and intelligent. Smart agricultural machinery, drones, and agricultural intelligent monitoring systems have become important supporting materials in agricultural production. From the perspective of the labor object, the scope of the new type of labor object is further extended. The labor object enters the category of large-scale agriculture. In addition to conventional animal and plant species, agricultural labor gradually extended to fields such as the ocean and sky.

Scholars have conducted relevant research on the relationship between agricultural new quality productivity and higher education, and have achieved a series of research results.

Liu Zaizhou et al. (2025) found that higher education has a significant positive impact on agricultural new quality productivity. To optimize the higher education system and provide strong momentum and important support for the

development of new agricultural productivity; To stimulate the characteristic effects and innovative vitality of agricultural new quality productivity[1]. Qi Zhanyong et al. (2025) found that higher vocational education promotes the development of agricultural new quality productivity from several aspects, including talent cultivation, technological innovation, industrial development, production transformation, and new quality governance. So it is necessary to strengthen top-level design and create a long-term mechanism that empowers new quality productivity; Reshaping the education plan and establishing a talent cultivation model based on innovative ability generation; Adhere to innovation collaboration and deepen the integrated innovation system of industry, academia and research; Focus on cross-border attributes and enhance adaptability in the new quality society[2]. Wang Rui et al. (2025) proposed specific suggestions for promoting the improvement of new quality productivity in agriculture through accounting disciplines in agricultural universities: reshaping the educational philosophy of agricultural universities and forming a new talent training model for accounting disciplines; Integrate the disciplinary layout of agricultural universities and promote the improvement of academic research level in accounting discipline; Extend the characteristic platform of agricultural universities and optimize the talent team of accounting disciplines; Optimize the discipline evaluation system of agricultural universities and promote the sustainable development of accounting disciplines[3]. Gao Yun et al. (2024) believe that agricultural colleges and universities should take the initiative to continuously improve their talent training system and provide talent support for the development and growth of new quality productivity; We need to strengthen the integration of science and education to promote original technological innovation[4]. Zhu Ying (2025) proposed that under the background of new quality productivity, the cultivation of agricultural college students needs to start from the following aspects: accelerating the adjustment of disciplinary and professional structure; Timely update educational concepts; Timely update educational methods; Incorporate the cultivation of agricultural sentiment into the curriculum[5]. Yang Weikun et al. (2025) found that under the background of new quality productivity, applied finance and economics colleges need to optimize the construction of disciplines and majors, build a new finance and economics curriculum system, strengthen the construction of teaching staff, promote the integration of industry and education, promote practical teaching and innovation and entrepreneurship education, carry out international education, and improve the quality evaluation mechanism of talent cultivation, in order to explore a talent cultivation path with their own characteristics[6]. Liang Haoran et al. (2025) believe that under the background of new quality productivity, agricultural universities in border ethnic areas need to focus on several aspects in talent cultivation: strengthening practical teaching; Enhance students' innovation ability and practical operation ability; Emphasize cultural inheritance and innovation[7].

From the research results of the scholars mentioned above, it can be seen that the relevant research on how to promote the improvement of agricultural new quality productivity through higher education is still in its initial stage.

2. The role of higher education in promoting the improvement of agricultural new quality productivity

The field of higher education is a highland for talent cultivation, a place for knowledge innovation, and an important base for providing social services. Higher education plays a very important role in enhancing the productivity of new agricultural products. Specifically, there are several main aspects.

One is to cultivate new high-quality agricultural talents. The improvement of new agricultural productivity relies on a large number of high-quality agricultural talents. Higher education is an important place for cultivating talents. Higher education institutions, especially those related to agriculture, can provide systematic professional education to cultivate high-level talents with solid theoretical foundations and innovative abilities to enhance the new quality productivity of agriculture in China. For example, in order to continuously improve the level of China's seed industry and cultivate more excellent varieties, innovation in biotechnology can provide a large number of seed industry research and development talents for society. Scientific reform and innovation in agricultural engineering can provide talent support for the design and development of higher-level agricultural production intelligent equipment for society. At the same time, through

continuous improvement in practical activities, we provide students with more opportunities to combine theory with practice, enhance their hands-on and brainpower abilities, so that they can adapt to social needs as soon as possible after graduation.

The second is to continuously improve the level of agricultural scientific and technological innovation. The level of agricultural technology is an important guarantee for promoting the improvement of new quality productivity in agriculture. Higher education institutions have unique advantages in promoting agricultural technological innovation. Universities are places where high-level talents and equipment gather. By focusing on outstanding talents, we can form a high-level research team to carry out agricultural technology innovation research. University teams can conduct corresponding research according to market needs. For example, fully utilizing big data technology to further enhance soil testing and fertilization capabilities, further improving the research level on the impact of weather and climate conditions on agricultural production, thereby reducing the negative impact of weather and climate on agricultural production in China. For example, developing new varieties that are resistant to pests and diseases and increase production can significantly reduce the use of pesticides and fertilizers in China, not only saving costs but also reducing adverse environmental impacts. Improving agricultural productivity while reducing adverse environmental impacts is the core of new quality agricultural productivity.

The third is to deepen the integration of industry, academia and research. The integration of industry, academia, and research can not only enhance the ability of knowledge to serve society, but also promote the rapid transformation of scientific research results, which is conducive to improving overall efficiency and enhancing agricultural productivity. Higher education institutions have significant advantages in this regard. Higher education institutions are not only the source of knowledge innovation, but also an important base for technological innovation. Higher education institutions should leverage their own advantages in scientific research and collaborate with enterprises to quickly transform the latest scientific research achievements into tangible products, helping to steadily improve the new quality productivity of agriculture.

3. The Challenges Faced by Higher Education in Promoting the Development of Agricultural New Quality Productivity

At present, the development momentum of higher education in China is good, but promoting the improvement of agricultural new quality productivity through higher education still faces some difficulties, mainly in several aspects.

One reason is that the discipline layout lags behind economic development. The concept of agricultural new quality productivity has not long emerged, and how to promote the improvement of agricultural new quality productivity through the development of higher education is a new topic. This new topic cannot be solved immediately. There is still no perfect plan for how to carry out new disciplinary layouts in current higher education to adapt to the requirements of new quality productivity in agriculture. This makes various universities think and explore corresponding disciplinary layouts, but it is obvious that such disciplinary layouts fall behind the requirements of economic and social development.

Secondly, there is an imbalance in the cultivation of relevant talents. The development of new agricultural productivity requires a large number of high-quality talents, especially a large number of high-quality agricultural talents. These high-quality talents not only need to have forward-looking thinking ability, be able to grasp the development direction of modern agriculture in China, comply with the requirements of the times, make the right choices, but also have very strong practical operation ability. In terms of cultivating high-end agricultural talents and curriculum design, it is common for existing universities to focus more on theory and neglect practice. Due to limited conditions, many universities lag behind in the construction of practical bases and the purchase of experimental equipment, which limits the improvement of students' practical abilities. In terms of teacher team construction, there are more teachers who focus on theory and fewer "dual teacher" teachers, which leads to a disconnect between talent cultivation and market demand.

Thirdly, the difficulty of transforming achievements is high. Under the current situation, effective communication

mechanisms between universities and agricultural production entities have not been fully established, and there are not many effective platforms for the transformation of scientific research results, making it difficult for scientific research results to be smoothly transformed into market demand products. At the same time, the commercialization and industrialization of agricultural scientific and technological achievements face characteristics such as short-term funding, technological constraints, and high market risks. These situations lead universities to be cautious in the transformation of agricultural scientific and technological achievements, which will affect the improvement of agricultural new quality productivity.

4. Strategies for Higher Education to Promote the Improvement of Agricultural New Quality Productivity

Based on the above analysis, we know that comprehensive measures need to be taken to enhance the productivity of new agricultural products. Specifically, we can start from the following aspects.

One is to optimize the layout of disciplines and build a scientific disciplinary and professional system. In terms of disciplinary and professional settings, it is important to keep up with the trend of the times, based on the practical needs of achieving rural revitalization and promoting agricultural and rural modernization in China. Corresponding disciplines should be established, such as adding new composite majors such as agricultural artificial intelligence, agricultural big data, and smart agriculture. For traditional agricultural majors, scientific adjustments should also be made, and corresponding new courses should be added according to the development needs of the situation. For the existing courses, the teaching process should reflect the idea of keeping up with the times and supplement some new content related to the development of new agricultural productivity, such as the application of artificial intelligence in the field of agriculture and the application of big data technology in predicting agricultural production varieties and quantities. By adjusting the layout of scientific disciplines and majors, higher education can provide high-quality talent support for the development of new agricultural productivity.

The second is to enhance the level of agricultural theoretical and technological innovation. Universities not only play an important role in disseminating knowledge, but also serve as leaders in knowledge innovation. Universities can collaborate with relevant research institutes and agricultural enterprises for theoretical and technological innovation. For example, after the start of a new discipline, the establishment of a theoretical system for related courses requires university teachers to collaborate with other relevant parties in order to obtain a practical theoretical system. Universities should also strengthen market research, increase contacts with agricultural enterprises, timely understand market demand, participate in targeted agricultural technology projects, and enhance the level of agricultural technology innovation. For example, in response to the current situation of widespread water shortage and high use of agricultural fertilizers in agricultural production in China, we will cooperate with relevant parties to research high-yield new varieties with low water consumption and strong resistance to diseases and pests, or develop new varieties.

The third is to enhance the ability to serve society. An important mission of higher education is to serve society. We will create theories and technological achievements to serve society and provide value-added services for society. We can leverage the talent and technological advantages of universities to increase training efforts for farmers and agricultural enterprise employees. Through targeted training, we can help students master advanced concepts and practical skills. Universities can also utilize their theoretical advantages and research and development capabilities to assist local governments in formulating relevant agricultural development plans, and to help specific agricultural enterprises develop their own development plans.

Disclosure statement

The author declares no conflict of interest.

References

[1] Liu Zaizhou, Wang Fayuan The Effect and Mechanism of Higher Education Empowering Agricultural New Quality Productivity: An Empirical Study Based on Provincial Panel Data Journal of Huazhong Agricultural University (Social Sciences Edition), 2025 (4): 1-6

[2] Qi Zhanyong, Wu Shitao The logical and collaborative path for higher vocational education to empower new quality productivity Higher Education Management, 2025 (1): 50-55

[3] Wang Rui, Liu Wenhui Research on the Path of Accounting Discipline Construction in Agricultural Universities for the Development of New Quality Agricultural Productivity Anhui Agricultural Science, 2025, 53 (9): 258-262

[4] Gao Yun, Zhao Xingyu The logical mechanism and practical direction of empowering the development and growth of new quality productivity in agricultural colleges and universities Journal of Shandong Agricultural Engineering College, 2024, 41 (12): 1-7

[5] Zhu Ying Thoughts on cultivating new agricultural college students under the background of new quality productivity Smart Agriculture Guide, 2025 (10): 142-143

[6] Yang Weikun, Yang Fan, Li Yi Exploring the Path of Cultivating Applied Talents in New Finance and Economics from the Perspective of New Quality Productivity Journal of Baoding University, 2025, 38 (3): 87-92

[7] Liang Haoran, Hu Shuangyu Research on the cultivation of agricultural professionals in universities in border ethnic areas from the perspective of new quality productivity: taking Yanbian University in Jilin Province as an example Shanxi Agricultural Economics, 2025 (8): 21-23